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Heterotopic pancreas presentation as a fundal submucosal mass, a case report

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Summary
Background Heterotopic pancreas is a rare submucosal lesion and generally an incidental finding. The important differential diagnosis is mesenchymal submucosal neoplasm. Here, we present a case with heterotopic pancreas presentation as a fundal submucosal mass.
Methods A 35-year-old male was admitted to our hospital due to a 9-month history of abdominal pain and fullness. Physical examinations and laboratory findings were normal. Esophagogastroduodenoscopy was performed. The patient underwent exploratory laparotomy and wedge resection of the stomach. The patient was symptom free 17 months later.
Results Esophagogastroduodenoscopy revealed a fundal mass. Histopathological examination confirmed ectopic pancreatic tissue involving submucosa and muscularis propria.
Conclusion Our case report demonstrates a very rare cause of fundal submucosal mass with abdominal pain and fullness. The physicians at major gastrointestinal referral centers are much more likely to be familiar with heterotopic pancreas and its clinical manifestation.

Keywords Ectopic pancreas · Gastric mass · Choristoma · Submucosal lesion · Aberrant pancreas

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Main novel aspects

- Heterotopic pancreas may be occurrence as gastric submucosal mass.
- From clinical and endoscopic aspects, heterotopic pancreas can mimic gastric neoplasms.
- It is necessary to have an exact histopathologic diagnosis of this lesion for prevention of improper treatment.

Introduction

Heterotopic pancreas (HP) is the existence of pancreatic tissue outside of its usual location which has no anatomical, vascular, or neural connection with innate pancreas, and is also termed ectopic or choristoma [1]. Jean Schultz depicted heterotopic pancreas in ileal diverticulum in for the first time 1729 [2], and Von Heinrich classified it for the first time in 1909 [3]. It is an embryonic anomaly occurring in nearly 5% of population [4], male dominant and mostly during the fourth to sixth decades of life [5]. It is mostly located in the gastrointestinal (GI) tract (70–94%) [6], consists of stomach, duodenum, and jejunum; less commonly ileum, Meckel's diverticulum, gallbladder, bile ducts, mesentery, fallopian tubes, spleen, omentum, mediastinum, and esophagus [1]. The mechanism of HP creation is not determined, but there are two hypotheses: The first is metaplasia, which explains the flight of metaplastic parts of pancreas in the endoderm to the submucosa in the embryonic period, and the second is misplacement, which states that while the foregut rotates, several components of the pancreas part from it and finally constitute mature pancreatic tissue in the GI tract [7].

Although most patients are asymptomatic and ectopic tissues are found incidentally during surgery or autopsy [1], they become clinically prominent when

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